in the following quadrants of the ring. Important as an ancestral type of such spiral and semi-spiral forms as *Staurodictya cruciata* (Pl. **42**, figs. 4, 12, &c.) and *Stylodictya clavata*, *Stylodictya stellata*, &c., of Ehrenberg, 1875 (Abhandl. d. k. Akad. d. Wiss. Berlin, Taf. xxiii. figs. 2, 7, 8, 9).

Dimensions.—Diameter of the ring 0.05 to 0.08, of the central chamber 0.06.

Habitat.—South Pacific, Station 295, depth 1500 fathoms.

Subgenus 4. Pentoniscus, Haeckel.

Definition.—Ring with five chambers, separated by five radial beams.

8. Archidiscus pentoniscus, n. sp.

Ring pentagonal or nearly circular, regular, connected with the central chamber by five radial beams of equal length and at equal distances (72°); therefore all five chambers of the ring of equal size and similar form. (Resembles the central part of the disk of *Pentinastrum asteriscus*, Pl. 44, fig. 2.)

Dimensions.—Diameter of the ring 0.05, of the central chamber 0.015.

Habitat.—North Pacific, Station 244, surface.

Subgenus 5. Hexoniscus, Haeckel.

Definition.—Ring with six chambers, separated by six radial beams.

9. Archidiscus hexoniscus, n. sp. (Pl 48, fig. 10, 10a).

Ring regular, hexagonal, or nearly circular, connected with the central chamber by six radial beams of equal length and at equal distances (60°); therefore all six chambers of the same size and form. (Resembles the central part of the disk of *Hexinastrum geryonidum*, Pl. 44, fig. 4.)

Dimensions.—Diameter of the ring 0.06, of the central chamber 0.018.

Habitat.—Central Pacific, Station 271, depth 2425 fathoms.

10. Archidiscus pyloniscus, n. sp. (Pl. 48, figs. 11, 11a).

Ring triangular, connected with the central chamber by six radial beams at alternating distances; therefore three larger chambers (of looser network) alternate with three smaller chambers (of denser network); pores of the former twice to three times as large as those of the latter. This species is of peculiar importance, as an immediate transitional form to the Pylodiscida. If these three larger ring chambers lose their few lattice-beams and so became open gates, we get *Triolene* or *Triopyle*, the original forms of the Pylodiscida.

Dimensions.—Diameter of the ring 0.05, of the central chamber 0.015.

Habitat.—Central Pacific, Station 266, depth 2750 fathoms.